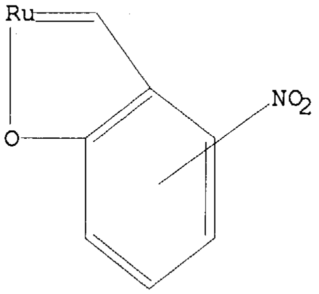
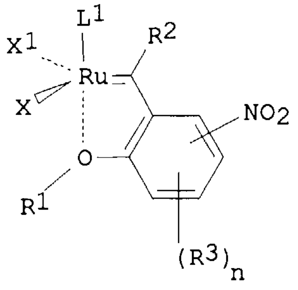
10/684,996

```
     (FILE 'HOME' ENTERED AT 15:15:37 ON 02 AUG 2004)

     FILE 'REGISTRY' ENTERED AT 15:17:40 ON 02 AUG 2004
L1                STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1                STR
```

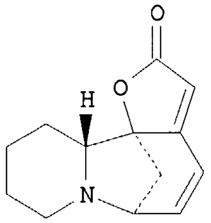


```
Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 15:18:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      13 TO ITERATE

100.0% PROCESSED      13 ITERATIONS                              0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:           44 TO      476
PROJECTED ANSWERS:               0 TO        0

L2             0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 15:18:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    437 TO ITERATE

100.0% PROCESSED     437 ITERATIONS                              7 ANSWERS
SEARCH TIME: 00.00.01

L3             7 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS                                  SINCE FILE     TOTAL
                                                           ENTRY   SESSION
FULL ESTIMATED COST                                       155.42    156.26

FILE 'CAPLUS' ENTERED AT 15:18:14 ON 02 AUG 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 2 Aug 2004  VOL 141 ISS 6
FILE LAST UPDATED: 1 Aug 2004  (20040801/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s l3
L4           9 L3

=> d 1-9 bib abs

L4   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:368212  CAPLUS
DN   141:71881
TI   Factors relevant for the ruthenium-benzylidene-catalyzed
     cyclopolymerization of 1,6-heptadyines
AU   Krause, Jens O.; Nuyken, Oskar; Buchmeiser, Michael R.
CS   Lehrstuhl fuer Makromolekulare Stoffe, Technische Universitaet Muenchen,
     Garching, 85747, Germany
SO   Chemistry--A European Journal (2004), 10(8), 2029-2035
     CODEN: CEUJED; ISSN: 0947-6539
PB   Wiley-VCH Verlag GmbH & Co. KGaA
DT   Journal
LA   English
AB   Fourteen metathesis initiators that had been designed for use in the
     living polymerization of di-Et dipropargylmalonate (DEDPM), including the
Hoveyda
     catalyst [RuCl2-(IMesH2)(:CH-2-(2-PrO)-C6H4)] (1a), as well as
     [Ru(CF3COO)2-(IMesH2)(:CH-2-(2-PrO)-C6H4)] (1b),
     [Ru(CF3CF2COO)2(IMesH2)(:CH-2- (2-PrO)-C6H4)] (1c), [Ru(CF3CF2CF2-
     COO)2(IMesH2)(:CH-2-(2-PrO) -C6H4)] (1d), [RuCl2(IMesH2)(:CH-2,4,5-(MeO)3-
     C6H2)] (2a), [Ru(CF3COO)2-(IMesH2)(:CH-2,4,5-(MeO)3-C6H2)] (2b),
     [Ru(CF3CF2COO)2(IMesH2)(:CH-2,4,5-(MeO)3-C6H2)] (2c), [Ru(CF3CF2-
     CF2COO)2(IMesH2)(CH-2,4,5-(MeO)3-C6H2)] (2d), [RuCl2(IMes)(:CH-2-(2-PrO)-
     C6H4)] (3a), [Ru(CF3COO)2-(IMes)(:CH-2-(2-PrO)-C6H4)] (3b),
     [RuCl2(IMesH2)(:CH-2-(2-PrO)-5-NO2-C6H3)] (4a), [Ru(CF3COO)2(IMesH2)(:CH-2-
     (2-PrO)-5-NO2-C6H3)] (4b), [Ru(CF3CF2COO)2(IMesH2)(:CH-2-(2-PrO)-5-NO2-
     C6H3)] (4c), and [Ru(CF3CF2CF2COO)2(IMesH2)(:CH-2-(2-PrO)-5-NO2-C6H3)]
     (4d) (IMes = 1,3-dimesitylimidazol-2-ylidene; IMesH2 =
     1,3-dimesityl-4,5-dihydroimidazol-2-ylidene) were prepared  Living
polymerization
     systems could be generated with DEDPM by careful tuning of the electronic
     nature and steric placement of the ligands.  Although 1a, 2a, 3a, 3b, and
     4a were inactive in the cyclopolymn. of DEDPM, and initiators 1b-d did not
     allow any control over mol. weight, initiators 2b-d and 4b-d offered access
     to class VI living polymerization systems.  In particular, compds. 2b and 4d
were
     superior.  The livingness of the systems was demonstrated by linear plots
     of Mn vs. the number of equivalent of monomer added (N).  For initiators 2b-d
and
     4b-d, values for kp/ki were in the range of 3-7, while 1b, 1c, and 1d
     showed a kp/ki ratio of > 1000, 80, and 40, resp.  The use of non-degassed
     solvents did not affect these measurements and underlined the high
     stability of these initiators.  The effective conjugation length (Neff)
     was calculated from the UV/Vis absorption maximum (λmax).  The final
     ruthenium content in the polymers was determined to be 3 ppm.
RE.CNT  47    THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:354955  CAPLUS
DN   140:357511
TI   Preparation of ruthenium carbene complexes as (pre)catalysts for
     metathesis reactions
IN   Grela, Karol
PA   Boehringer Ingelheim International G.m.b.H., Germany
SO   PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2004035596        A1    20040429    WO 2003-EP11222        20031010
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     DE 20320324          U1    20040701    DE 2003-20320324       20031010
     US 2004127350        A1    20040701    US 2003-684996         20031014
PRAI PL 2002-356652       A     20021015
     US 2002-428072P      P     20021121
OS   CASREACT 140:357511; MARPAT 140:357511
GI
```



I

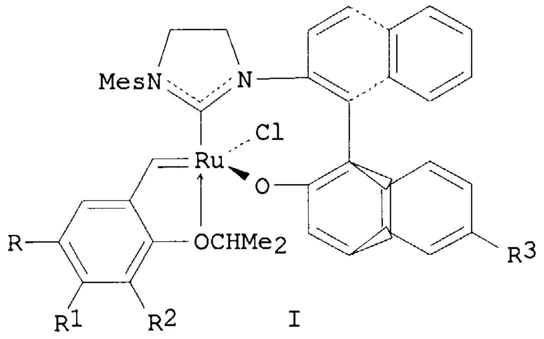
```
AB   The invention relates to the preparation of new ruthenium carbene complexes I
     (L1 = neutral ligand; X, X1 = anionic ligands; R1 = C1-5 alkyl, C5-6
     cycloalkyl; R2 = H, C1-20 alkyl, C2-20 alkenyl, C2-20 alkynyl, aryl; R3 =
     C1-6 alkyl, C1-6 alkoxy, C1-6 alkyl or alkoxy substituted aryl; n = 0-3).
     I are convenient (pre)catalysts for metathesis reactions and can be
     applied i.e. for ring-closing metathesis, cross metathesis or ene-yne
     metathesis reactions.  Thus, CuCl-mediated reaction of
     2-isopropoxy-5-nitrostyrene (preparation given) with Cl2Ru(L1)(PCy3)(:CH2Ph)
     (L1 = 1,3-bis(mesityl)imidazolidene) in CH2Cl2 gave 83% of title I (L1 =
     same, X, X1 = Cl, R1 = iPr, R2, (R3)n = H, and 4-substituted NO2), which
     was used as cross metathesis catalyst (example given).
RE.CNT  2      THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 3 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:958509  CAPLUS
DN   140:146315
TI   First Diastereoselective Chiral Synthesis of (-)-Securinine
AU   Honda, Toshio; Namiki, Hidenori; Kaneda, Kyosuke; Mizutani, Hirotake
CS   Faculty of Pharmaceutical Sciences, Hoshi University, Shinagawa-ku, Tokyo,
     142-8501, Japan
SO   Organic Letters (2004), 6(1), 87-89
     CODEN: ORLEF7; ISSN: 1523-7060
PB   American Chemical Society
DT   Journal
LA   English
OS   CASREACT 140:146315
GI
```



I

```
AB   A diastereoselective total synthesis of securinine (I) in optically pure
     form was achieved by employing ring-closing metathesis of the
     corresponding dienyne compound as a key step.  A potential intermediate of
     viroallosecurinine was also prepared using this method.
RE.CNT  29     THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 4 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:957367  CAPLUS
DN   141:98353
TI   A new approach to the synthesis of porphyrin-fullerene dyads
AU   Ostrowski, Stanislaw; Mikus, Agnieszka
CS   Institute of Chemistry, University of Podlasie, Siedlce, Pol.
SO   Molecular Diversity (2003), 6(3-4), 315-321
     CODEN: MODIF4; ISSN: 1381-1991
PB   Kluwer Academic Publishers
DT   Journal
LA   English
AB   A new synthetic approach to porphyrin-fullerene dyads using
     tetraphenylporphyrin (TPP) and three novel reactions (vicarious
     nucleophilic substitution, metathesis, and [4+2]-cycloaddn. to fullerene)
     is described.  5-(4-Nitrophenyl)-10,15,20-triphenylporphyrin zinc complex
     reacts with the carbanion of chloromethyl p-tolyl sulfone (which bears a
     leaving group Cl at the carbanionic center), affording the nucleophilic
     substitution of hydrogen product containing a CH2SO2Tol group.  The product
     obtained when alkylated with an alkyl halide (bearing an acetylenic
     function in the terminal position), followed by the cross-enyne metathesis
     reaction (using an efficient ruthenium catalyst), gave a TPP-diene
     building block.  Its Diels-Alder reaction with C60-fullerene led to the
     title dyad - a new artificial photosynthetic model.  This method opens up
```

```
          the possibility for synthesis of dyads with variable distances between
          chromophores, depending on the type of the alkyl halides used.
RE.CNT  35     THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 5 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN    2003:738568  CAPLUS
DN    140:4680
TI    Chiral Ru-Based Complexes for Asymmetric Olefin Metathesis: Enhancement of
      Catalyst Activity through Steric and Electronic Modification
AU    Van Veldhuizen, Joshua J.; Gillingham, Dennis G.; Garber, Steven B.;
      Kataoka, Osamu; Hoveyda, Amir H.
CS    Department of Chemistry, Merkert Chemistry Center, Boston College,
      Chestnut Hill, MA, 02467, USA
SO    Journal of the American Chemical Society (2003), 125(41), 12502-12508
      CODEN: JACSAT; ISSN: 0002-7863
PB    American Chemical Society
DT    Journal
LA    English
OS    CASREACT 140:4680
GI
```

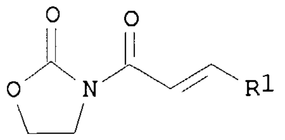


I

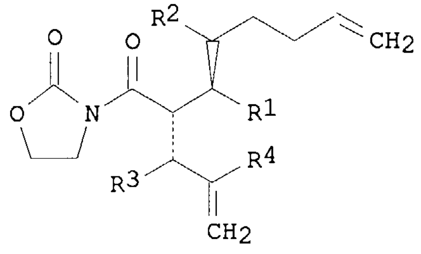
```
AB    Design, synthesis, characterization, and catalytic activity of six
      enantiomerically pure Ru-based metathesis catalysts I (R = NO2, MeO, H,
      R1-R3 = H; R = R2 = R3 = H, R1 = OMe; R = R1 = H, R2 = Ph, R3 = H, CF3;
      R-R2 = H, R3 = CF3; Mes = 2,4,6-Me3C6H2) are disclosed.  The new chiral
      catalysts were prepared through steric and electronic alterations of the
      parent catalyst system.  The effect of structural modifications of chiral
      complex does not always correspond to those of the related achiral
      complexes.  Modified Ru complexes I (R = R1 = H; R2 = H, Ph; R3 = CF3)
      deliver reactivity levels that are more than 2 orders of magnitude higher
      than parent catalyst system.  Reactivity and phys. data are provided that
      shed light on the origin of activity differences.  Some members of the new
      generation of chiral Ru catalysts promote asym. ring-opening (AROM) and
      ring-closing (ARCM) metathesis that cannot be effected by the first
      generation chiral catalyst.
RE.CNT  53     THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 6 OF 9  CAPLUS  COPYRIGHT 2004 ACS on STN
AN    2003:604514  CAPLUS
DN    139:276946
TI    Synthesis of substituted P-stereogenic vinylphosphine oxides by olefin
      cross-metathesis
AU    Demchuk, Oleg M.; Pietrusiewicz, K. Michal; Michrowska, Anna; Grela, Karol
CS    Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw,
```

01-224, Pol.
SO Organic Letters (2003), 5(18), 3217-3220
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 139:276946
AB Substituted vinylphosphine oxides were prepared in good yield with exclusive (E)-olefin selectivity via olefin cross-metathesis using Grubbs and Hoveyda-type ruthenium catalysts. In addition, metathesis of chiral vinylphosphine oxides proceeded without racemization of the phosphorus chirality center, providing easy access to functionalized chiral nonracemic (E)-alkenylphosphine oxides. For example, Br(CH2)4CH:CH2 reacted with (SP)-CH2:CHP(O)(Ph)CH3 in the presence of 5 mol % ruthenium catalyst giving (SP,E)-Br(CH2)4CH:CHP(O)(Ph)CH3 in 86% yield.
RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

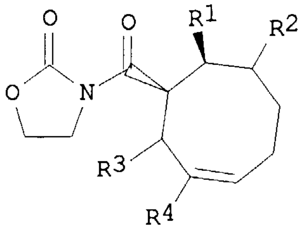
L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:524314 CAPLUS
DN 139:214135
TI Tandem Radical Reactions and Ring-Closing Metathesis. Application in the Synthesis of Cyclooctenes
AU Sibi, Mukund P.; Aasmul, Mona; Hasegawa, Hikaru; Subramanian, Thangaiah
CS Department of Chemistry, North Dakota State University, Fargo, ND, 58015-5516, USA
SO Organic Letters (2003), 5(16), 2883-2886
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 139:214135
GI



I



II



III

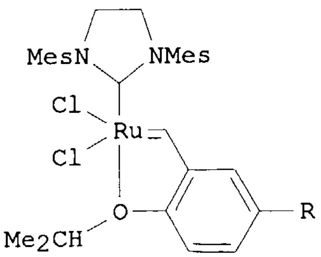
AB Fumarate- and acrylate-substituted oxazolidinones I (R1 = H, Me3CO2C) undergo tandem radical reaction with iodoalkenes H2C:CHCH2CH2CR2I (R2 = H, Me) and alkenyl stannanes R3CH:CR4CH2SnBu3 (R3, R4 = H, Me) to form dienes II in moderate to good yields. II provide cyclooctenes III in moderate to good yields after ring-closing metathesis. The role of the carbon backbone substituents and other variables in the efficiency of the eight-membered ring formation is discussed.

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:443314 CAPLUS
DN 139:245450
TI Cross-metathesis reaction of vinyl sulfones and sulfoxides
AU Michrowska, Anna; Bieniek, Michal; Kim, Mikhail; Klajn, Rafal; Grela, Karol
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, PL01-224, Pol.
SO Tetrahedron (2003), 59(25), 4525-4531
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier Science B.V.
DT Journal
LA English
OS CASREACT 139:245450
AB Cross-metathesis reactions of α,β-unsatd. sulfones and sulfoxides in the presence of molybdenum and ruthenium pre-catalysts were tested. A selective metathesis reaction was achieved between functionalized terminal olefins and vinyl sulfones by using the second generation ruthenium catalysts, while the highly active Schrock Mo catalyst was found to be functional group incompatible with vinyl sulfones. The cross-metathesis products were isolated in good yields with an excellent (E)-selectivity. Both the molybdenum and ruthenium-based complexes were, however, incompatible with α,β- and β,γ-unsatd. sulfoxides.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:908270 CAPLUS
DN 138:254579
TI A highly efficient ruthenium catalyst for metathesis reactions
AU Grela, Karol; Harutyunyan, Syuzanna; Michrowska, Anna
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01-224, Pol.
SO Angewandte Chemie, International Edition (2002), 41(21), 4038-4040
CODEN: ACIEF5; ISSN: 1433-7851
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
OS CASREACT 138:254579
GI



I

AB The ruthenium alkylidene precatalyst I (R = NO2, Mes = 2,4,6-trimethylphenyl), bearing an electron-withdrawing substituent, is more reactive than I (R = H, Br) in the cross metathesis (CM) of terminal alkenes, e.g., CH2:CHCH2CH2NTsCH2CH2CH:CH2. The cross metathesis of terminal alkenes and α,β-unsatd. compds., e.g., Me3CSiMe2O(CH2)4CH:CH2, can also be performed at room temperature E.g., cross metathesis of Me3CSiMe2O(CH2)4CH:CH2 and MeCOCH:CH2 gave Me3CSiMe2O(CH2)4CH:CHCOMe (E:Z = 99:1). I (R = NO2, Mes = 2,4,6-trimethylphenyl) operates under very mild conditions and can be applied in various types of metathesis reactions (RCM, CM, enyne).

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT